

**To:** Adams, Wendy[Adams.Wendy@epa.gov]; Zavala, Angie[zavala.angie@epa.gov]; Terada, Calvin[Terada.Calvin@epa.gov]; Becker, Dale[Becker.Dale@epa.gov]; Heister, Dan[Heister.Dan@epa.gov]; Rees, David[Rees.David@epa.gov]; Liverman, Earl[Liverman.Earl@epa.gov]; Garcia, Leticia[Garcia.Leticia@epa.gov]; Weigel, Greg[Weigel.Greg@epa.gov]; Fowlow, Jeffrey[Fowlow.Jeffrey@epa.gov]; Rodin, Jeffry[Rodin.Jeffry@epa.gov]; Johnson, Jennifer S.[Johnson.JenniferS@epa.gov]; Clark, Josie[Clark.Josie@epa.gov]; Parker, Kathy[Parker.Kathy@epa.gov]; Kumar, Nilesh[Kumar.Neil@epa.gov]; Leefers, Kristin[Leefers.Kristin@epa.gov]; MacDonald, Jennifer[Macdonald.Jennifer@epa.gov]; Combes, Marcia[Combes.Marcia@epa.gov]; Carr, Matt[Carr.Matthew@epa.gov]; Boykin, Michael[Boykin.Michael@epa.gov]; Sibley, Michael[Sibley.Michael@epa.gov]; Jamison, Myrna[Jamison.Myrna@epa.gov]; Knowles, Nicholas[knowles.nicholas@epa.gov]; Franklin, Richard[Franklin.Richard@epa.gov]; Whittier, Robert[Whittier.Robert@epa.gov]; Smith, Sharon[smith.sharon@epa.gov]; Stanfield, Brooks[Stanfield.Brooks@epa.gov]

**Cc:** Hendrickson, Andrew[Hendrickson.Andrew@epa.gov]; Labaw, Joanne[labaw.joanne@epa.gov]; Blocker, Shawn[Blocker.Shawn@epa.gov]; Gable, Debra[Gable.Debra@epa.gov]; Dunbar, Bill[dunbar.bill@epa.gov]; Ehrig, Lance[Ehrig.Lance@epa.gov]; Eoc, Epahq[Eoc.Epahq@epa.gov]; Erikson, Linda[Erikson.Linda@epa.gov]; Faulk, Dennis[Faulk.Dennis@epa.gov]; Field, Chris[Field.Chris@epa.gov]; Grandinetti, Cami[Grandinetti.Cami@epa.gov]; Holsman, Marianne[Holsman.Marianne@epa.gov]; Ingemansen, Dean[Ingemansen.Dean@epa.gov]; Irizarry, Gilberto[Irizarry.Gilberto@epa.gov]; Leckrone-Lee, Judith[Leckrone-Lee.Judith@epa.gov]; Lee, Eugene[Lee.Eugene@epa.gov]; MacIntyre, Mark[Macintyre.Mark@epa.gov]; Magorrian, Matthew[Magorrian.Matthew@epa.gov]; Moon, Wally[Moon.Wally@epa.gov]; Murchie, Peter[Murchie.Peter@epa.gov]; Nakamura, LisaMarie[Nakamura.LisaMarie@epa.gov]; Owens, Ted[Owens.Ted@epa.gov]; Philip, Jeff[Philip.Jeff@epa.gov]; R10WatchDesk[R10WatchDesk@epa.gov]; Rubenstein, Peter[Rubenstein.Peter@epa.gov]; Schlieger, Brian[schlieger.brian@epa.gov]; Sheldrake, Beth[sheldrake.beth@epa.gov]; Sven (Srodenbeck@cdc.gov)[Srodenbeck@cdc.gov]; Tyler, Kendra[Tyler.Kendra@epa.gov]; Williamson, Ann[Williamson.Ann@epa.gov]; Woodyard, Josh[Woodyard.Joshua@epa.gov]; Zhen, Davis[Zhen.Davis@epa.gov]

**From:** Terada, Calvin

**Sent:** Mon 8/17/2015 11:17:48 PM

**Subject:** FW: EOC Spot Report Update #11: Region 8, Gold King Mine Release into Animas River; San Juan County, CO

Folks,

FYI

Calvin

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Calvin J. Terada, Manager

Emergency Response Unit

Emergency Management Program

Office of Environmental Cleanup

U.S. Environmental Protection Agency – Region 10

1200 Sixth Avenue, Suite 900 (ECL-133)

Seattle, WA 98101

(O) (206) 553-4141

(F) (206) 553-0175

(C) (206) 790-7806

EPA Spill Line (206) 553-1263

National Response Center (800) 424-8802

**From:** Eoc, Epahq

**Sent:** Monday, August 17, 2015 3:28 PM

**To:** Eoc, Epahq

**Subject:** EOC Spot Report Update #11: Region 8, Gold King Mine Release into Animas River; San Juan County, CO

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# **EOC Spot Report Update #11: Region 8, Gold King Mine Release into Animas River; San Juan County, CO**

**US Environmental Protection Agency**

**Report as of 1830 EDT on 08/17/2015**

## **Overview:**

On 8/5, an EPA and Colorado State Division of Reclamation Mining and Safety team was working to investigate and address contamination at the abandoned Gold King Mine in San Juan County, CO. A large release of mine wastewater into Cement Creek occurred while an EPA site assessment team was conducting site investigation activities. Initial estimates indicated that the release was approximately one million gallons that was held behind unconsolidated debris near an abandoned mine portal. The estimate has since been revised to 3 million gallons. There were several workers at the site at the time of the breach and all were unharmed. The release's path flows through three of EPA's regions: Region 8—Colorado, Utah and the Southern Ute Tribe; Region 6--New Mexico; and, Region 9--Navajo Nation.

The mine water is being treated in a series of settling ponds constructed near the portal. The treatment appears to be effective. The pH of the water is being raised with the addition of lime and sodium hydroxide solution to facilitate sedimentation of the metals in the ponds and flocculant is being added to increase the amount of sedimentation.

State, Local and other Federal Agency Actions: The Region 8 Unified Incident Command includes EPA, State of Colorado Office of Emergency Management (OEM), the Southern Ute Indian Tribe (SUIT), and La Plata County. The City of Durango, CDPHE, and the Ute Mountain Ute Tribe are Agency Representatives. San Juan County is an Agency Administrator. The SUIT continues water delivery. As a proactive measure, the SUIT is installing reverse osmosis on tribal residential kitchen taps. If well sampling results show any concerns, additional actions will be taken.

US Bureau of Reclamation (USBOR) is conducting road stabilization in and around the mine site.

The City of Durango and the Ute Mountain Ute Tribe are involved through via their agency

representatives. San Juan County is an Agency Administrator.

The EPA Region 8 is coordinating with Agency for Toxic Substances and Disease Registry (ATSDR) in response to public health concerns/questions associated with the mine waste plume. ATSDR has been in communication with local health officials at San Juan Basin Health Department and San Juan County Public Health in Colorado. Public health questions should be directed to these local public health organizations.

San Juan County officials are engaged in the response activities. State officials are also on scene. Following the release, the Colorado Department of Public Health and the Environment (CDPHE) notified water users downstream so they could take appropriate steps to turn off intakes until the contaminated water passes. The U.S. Geological Survey (USGS) measured increased river flows and provisionally calculated flow volume of approximately 3 million gallons discharged from the Gold King Mine. The La Plata County Sheriff opened the Animas River to recreational use on 8/14 with a health advisory from CDPHE. A Colorado State veterinarian has cleared water use for animals.

On 8/14, NMED and the Department of Health lifted the ban on using private water wells. On 8/14, the City of Durango resumed pumping water from the Animas River for further treatment. This decision was made in conjunction with the CDPHE. The City will continue to analyze water quality samples, based on pre-established protocols. The City has also lifted the outdoor irrigation restrictions.

#### **EPA Actions:**

*Response Organization:* EPA is integrated in Unified Command in Durango, CO and in three Incident Command Posts (ICPs) in Silverton and Durango, CO, Farmington, NM with a branch Lake Powell (at the Arizona and Utah Border). Unified EPA Area Command has stood up operations out of Durango, CO with representatives from EPA Regions 6, 8 and 9. The Region 10 REOC activated on 8/14, to support the Gold King and Typhoon responses, and the RICT was activated 8/16, to assist in evaluating additional RSC and IMT KLP members for possible deployment based on the resources requested.

The EPA continues to operate and work on optimizing four treatment and sedimentation ponds at the mine site which are treating water by lowering acidity levels and removing dissolved metals. Heavy rains on 8/16/2015 resulted in murky water in Cement Creek and caused difficulties in the road stabilization work. The road stabilization work continues today.

A public-facing website has been set up for the response: <http://www2.epa.gov/goldkingmine>. EPA is reviewing sampling data and developing public messaging to include the development of a wider message that river conditions are returning to normal. This will include the development of Q&A sheets and fact sheets. Beginning 8/16, there will be two Public Information Officers in Silverton, CO. A public event called "Durango is back – River and Bike Parade" has been scheduled for 8/18 to mark the re-opening of the Animas River.

On 8/16 meetings were held at the Mexican Water Chapter (25 in attendance) and the Guadalupe Chapter (40 in attendance). A community meeting will be held in Farmington the evening of August 17, 2015 at 6 pm MDT.

Social Media Sites being maintained by the UC JIC through local and state resources are:

Blog – [goldkingminerelease.blogspot.com](http://goldkingminerelease.blogspot.com)

FB – [facebook.com/goldkingminerelease](https://facebook.com/goldkingminerelease)

Twitter - @GKMRelease

YouTube Channel – Gold King Mine Release

The blog has received just under 500 hits in the last 48 hours.

A pilot test flush of the Animas Consolidate Irrigation Ditch was conducted late in the day on 8/12. The purpose of the test was to visually evaluate sediment transport conditions that would occur upon partially opening the control gate. Ferrous sediments were observed to have been deposited bank to bank in the channel as a result of the mine release. As of 8/15, all irrigation ditches in Region 8 are open and available for use.

*Sampling and Data Review:* The HQ Environmental Unit (EU) continues to assist with data validation. Daily residential well sampling continues. On 8/18/2015 the EPA and CDPHE will be assessing the upper Animas River through the canyon. Animas River sediment samples were posted to the incident website on 8/14. No results exceeded recreational screening levels. On 8/15, EPA released additional water quality data from 8/7 to 8/11 on the San Juan River between Farmington and Shiprock, NM.

USGS has invited EPA to participate in a 12-day program to sample the Lake Powell Basin for mercury and other heavy metals as needed. A START contractor will be provided for this effort.

*Water Delivery and Supply:* NMED informed EPA that the Town of Morningstar's reserve had dropped drastically and the Town only had an estimated 48 hours of available supply as of 8/14. Morningstar and Farmington are completing the connection between their water systems, current plans are to complete this task the afternoon of 8/17. The water system operators will

complete the connections and will operate the system once functional. Although the public water intakes have been opened it will take at least 48 hours for the system to completely come back on line. On 8/15, EPA began transporting and offloading raw water into Morningstar's pretreatment settling ponds.

EPA evaluated NMED Drinking Water Bureau's criteria as discussed in their "DWB recommendations for removing advisory to refrain from drawing river water" document. EPA had a follow up discussion with NMED on both short and long term criteria as proposed in their submission. EPA requested that NMED provide clarification on some elements of their recommendations. EPA will continue collaboration with NMED.

Navajo Tribal Utility Authority has identified 13 locations for storage to allow for EPA to distribute water for agriculture and livestock use. EPA continues providing over 16,000 gallons of water per day to each of these locations. NTUA is working on putting their water distribution lines back online so that delivery of water can be discontinued.

*Claims:* EPA has a claims process for compensating citizens who suffer personal injury or property damage caused by U.S. government actions. The process includes guidance on documentation that may be required to support claims for loss of employment and loss of income, among other claims. Region 8 has had inquiries about such claims from business owners in CO.

See previous reports for past EPA regional and HQ actions.

**Media Interest:** High

[http://www.denverpost.com/environment/ci\\_28647978/colorado-faces-230-mines-leaking-heavy-metals-into](http://www.denverpost.com/environment/ci_28647978/colorado-faces-230-mines-leaking-heavy-metals-into)

[http://www.nytimes.com/2015/08/17/us/animas-river-colorado-mine-spill-epa.html?\\_r=0](http://www.nytimes.com/2015/08/17/us/animas-river-colorado-mine-spill-epa.html?_r=0)

[http://www.denverpost.com/news/ci\\_28645132/epa-plans-water-treatment-system-gold-king-mine](http://www.denverpost.com/news/ci_28645132/epa-plans-water-treatment-system-gold-king-mine)

<http://dailysignal.com/2015/08/14/gold-king-mine-spill-the-epa-is-the-polluter/>

<http://www.cnn.com/2015/08/13/us/colorado-epa-animas-river-spill-owner/index.html>

<http://nmpoliticalreport.com/10024/what-reporters-on-the-ground-are-hearing-about-animas-river-spill/>

**The HQ EOC will continue to monitor and provided updates as needed.**

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Nancy Abrams, Watch Officer

U.S. Environmental Protection Agency

Headquarters Emergency Operations Center

1200 Pennsylvania Ave

Washington, DC 20004

202-564-3850

<mailto:eoc.epahq@epa.gov>

